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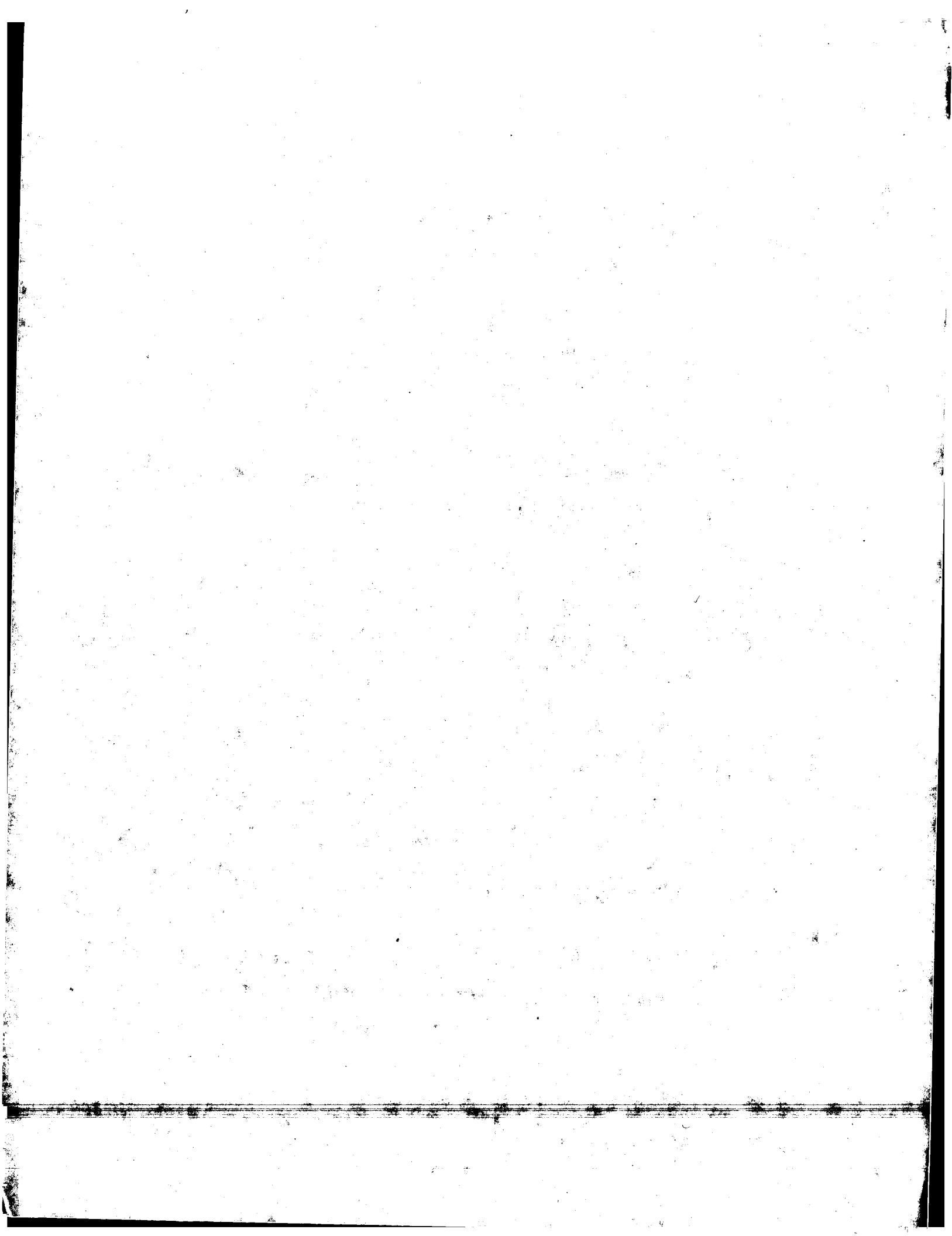
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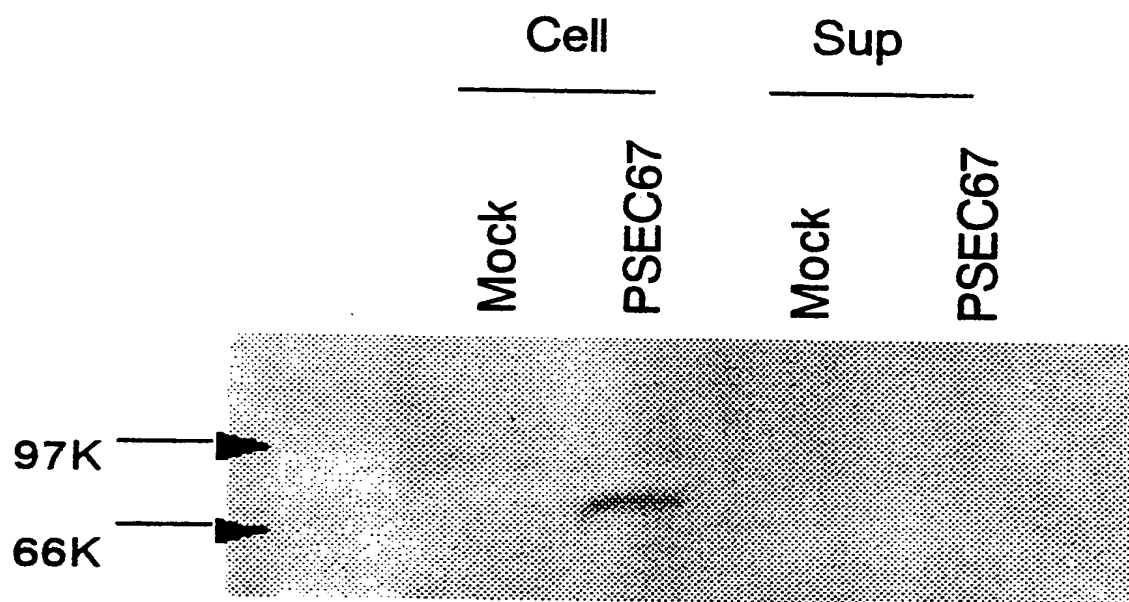
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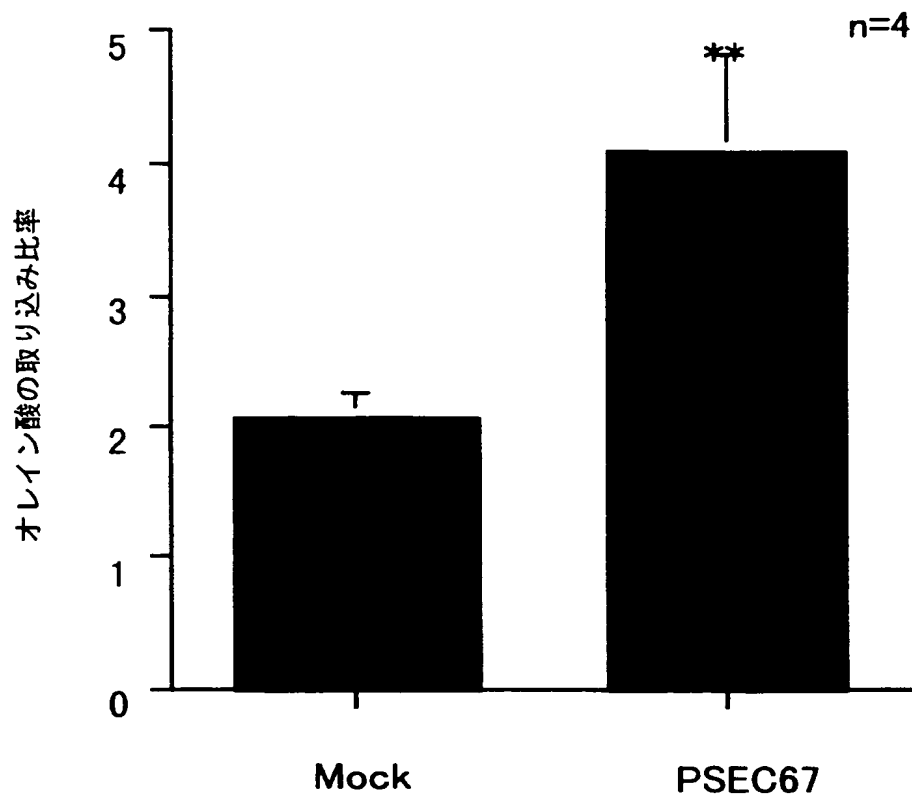
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図 2





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図 3

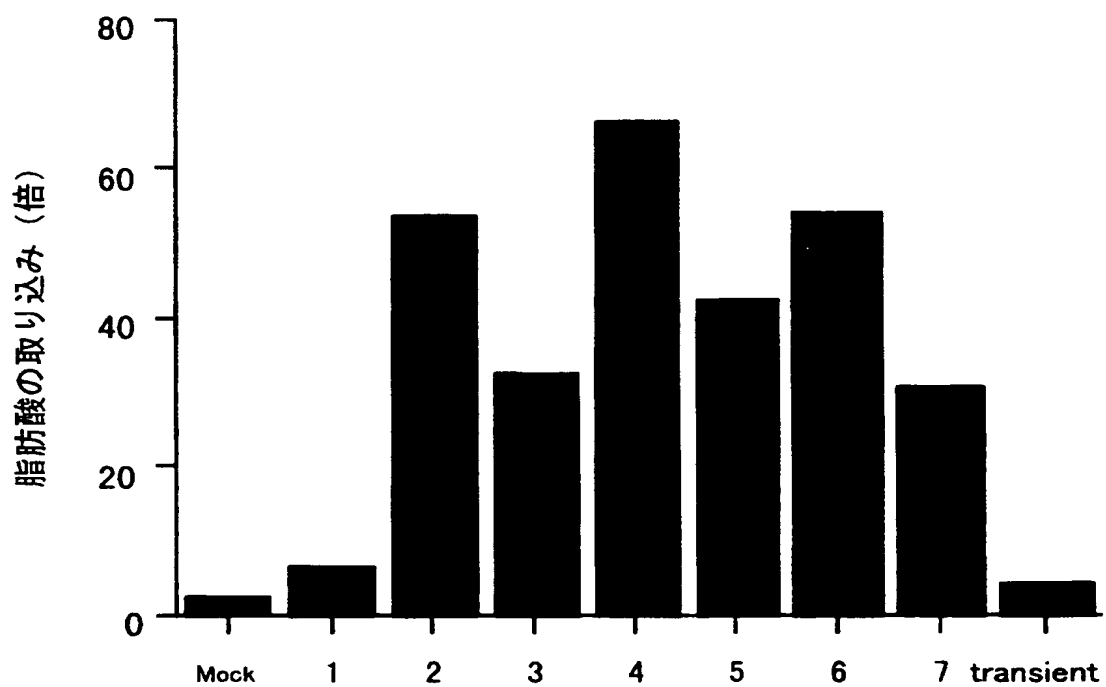






図 4

PSEC67

肺 前立腺 胸腺 脳 心臓 小腸 胎盤 卵巣 精巣 膵臓 白血球 骨格筋 腎臓 脾臓 肝臓 大腸



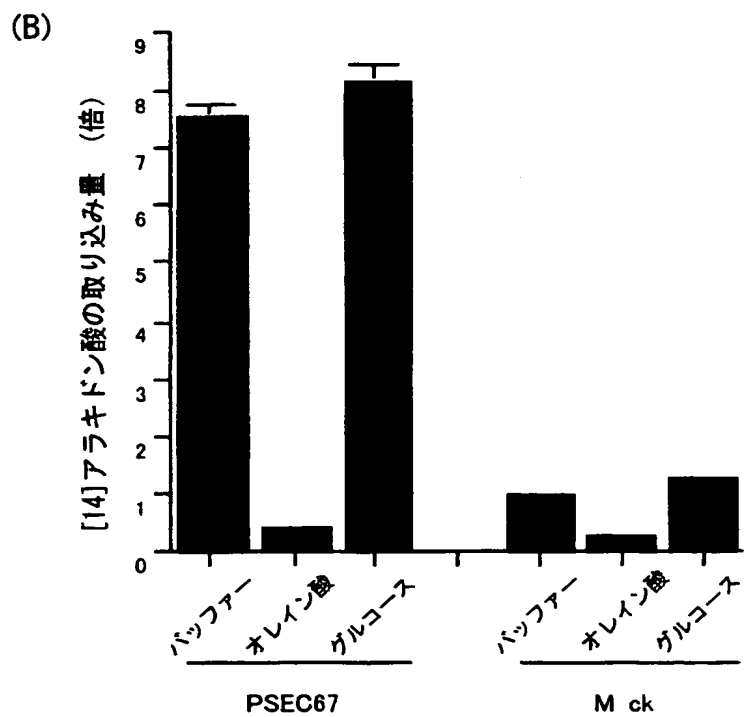
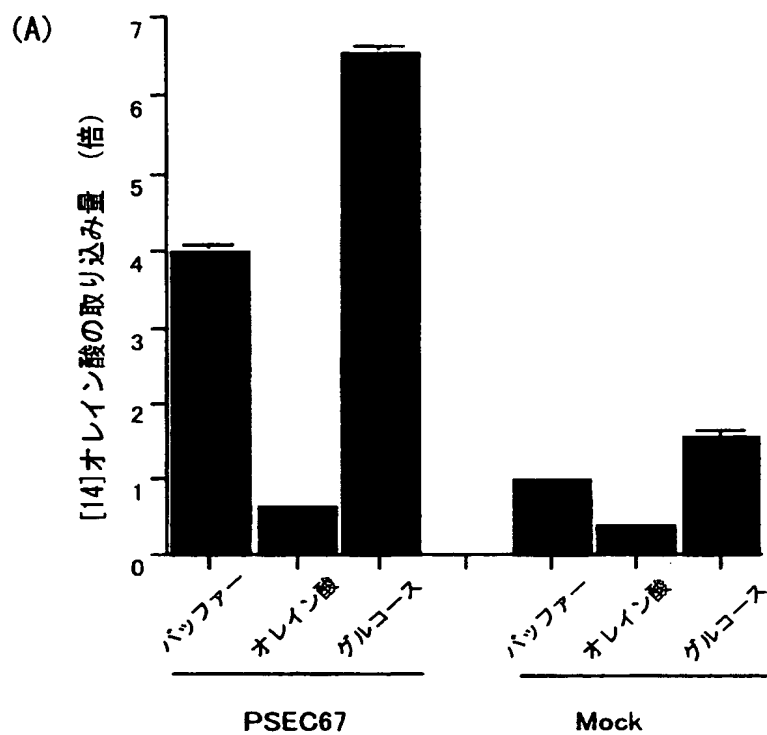
G3PDH





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図 5





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図 6

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m. FATP3:	98	AC G GC GCA GCGC TT CTACG G G AGGCTG G C G GA C CGG G ACGGCGC-GCA-GCGCTTTAGCTACGCG-G-AGGCTGAG-CGCGAGAGCAACCGGATTG	151
PSEC67:	559	CGACAGCGGCGAGGGGAGCGCTGGAGAAGGCGAGCGGGCAGCGCCG-GGAGCCGG-AGAT	616
m. FATP3:	152	C C GCG C G GCGC G G G GA CGGG CGCCG GG C GG AG CT-C-GCGCCTTTCTGCGCGCACGGGGCTG-GACCGGGGGCCGCCGAGGCTCGGGCAGGG	208
PSEC67:	617	GCAGCGGCC-GGAAG-CGG-CGCG-GAGTTTGCCGGAGGG-GACGGTGCCGCCAGAGGT	670
m. FATP3:	209	GCAGC GGAAG CG CGCG G G T CCGG GG GA G GC GC AGAGG GCAGACTGAGGAAGCGCACGCGTGCGCCT-CCGGCTGGAGATGCGGTGCTAGAGG-	266
PSEC67:	671	GGAGGAGCCGCCGCCCTCTGTCACTGGAGCAACTGTGGCGCTGCTCCTCCCCGCTGGC	730
m. FATP3:	267	GA GA CCGC CCCCTCTG CACC GG GC AC GTGGCGCTGCTCCTCCC GC GGC -GACGA-CCGCGCCCCCTCTGGCACCCGGGGCGACCGTGGCGCTGCTCCTCCAGCGGGC	324
PSEC67:	731	CCAGAGTTTCTGTGGCTCTGGTTTCGGGCTGGCCAAGGCCGGCCTGCGCACTGCCCTTTGTG	790
m. FATP3:	325	CC GA TT CT TGG T TGGTTTCGG CTGGCCAA GC GGCCTGCGCAC GCCTTTGTG CCGGATTTCCTTTGGATTGTGTTTCGGACTGGCCAAAGCTGGCCTGCGCACGGCCTTTGTG	384
PSEC67:	791	CCCACCGCCTGCGCCGGGGCCCCCTGCTGCACTGCCTCCGCAGCTGCGGCGCGCGCGC	850
m. FATP3:	385	CCCACCGC T CGCCG GG CCCCTGCTGCACTGCCTCCGCAGCTGCGG GCG G GCG CCCACCGCTTTACGCCGAGGACCCCTGCTGCACTGCCTCCGCAGCTGCGGTGCGAGTGCG	444
PSEC67:	851	CTGGTGCTGGCGCCAGAGTTTCTGGAGTCCCTGGAGCCGGACCTGCCCGCCCTGAGAGCC	910
m. FATP3:	445	CT GTGCTGGC CAGAGTT CTGGAGTCCCTGGAGCCGGACCTGCC GCC TGAGAGCC CTCGTGCTGGCCACAGAGTTCTGGAGTCCCTGGAGCCGGACCTGCCGGCCTTGAGAGCC	504
PSEC67:	911	ATGGGGCTCCACCTGTGGGCTGCGAGGCCAGGAACCCACCCTGCTGGAATTAGCGATTTG	970
m. FATP3:	505	ATGGGGCTCCACCT TGGGC C GGCC G AAC A GCTGGAAT AGC ATTTG ATGGGGCTCCACCTATGGGCGACGGGCCCTGAACTAATGTAGCTGGAATCAGCAATTTG	564
PSEC67:	971	CTGGCTGAAGTGTCGCTGAAGTGGATGGGCCAGTGCCAGGATACCTCTCTTCCCCCAG	1030
m. FATP3:	565	CT C GAAG C G AAGTGGATG GCCAGTGCC GG TACCTCTCT CCCCCAG CTATCGGAAGCAGCAGACCAAGTGGATGAGCCAGTGCCGGGGTACCTCTCTGCCCCCAG	624
PSEC67:	1031	AGCATAACAGACAGTGCCTGTACATCTTACCTCTGGCACCACGGGCCTCCCCAAGGCT	1090
m. FATP3:	625	A CATAA GACAC TGCCTGTACATCTTACCTCTGGCAC AC GGCCT CCAAGGCT AACATAATGGACACCTGCCTGTACATCTTACCTCTGGCACTACTGGCTGCCCAAGGCT	684
PSEC67:	1091	GCTCGGATCAGTCATCTGAAGATCCTGCAATGCCAGGGCTTCTATCAGCTGTGTGGTGTC	1150
m. FATP3:	685	GCTCG ATCAGTCATCTGAAG T CT CA TGCCAGGG TTCTA CA CTGTGTGG GTC GCTCGAATCAGTCATCTGAAGTTCTACAGTGCCAGGGATTCTACCATCTGTGTGGAGTC	744
PSEC67:	1151	CACCAGGAAGATGTGATCTACCTCGCCCTCCCACTCTACCACATGTCCGGTTCCCTGCTG	1210
m. FATP3:	745	CACCAGGA GA GTGATCTACCTCGC CTCCCACT TACCACATGTC GG TCCCT CTG CACCAGGAGGACGTGATCTACCTCGCACTCCCACTGTACCACATGTCTGGTCCCTTCTG	804
PSEC67:	1211	GGCATCGTGGGCTGCATGGGCATTGGGGCCACAGTGGTGCTGAAATCCAAGTTCTCGGCT	1270
m. FATP3:	805	GGCAT GTGGGCTGC TGGGCATTGGGGCCAC GTGGTGCTGAAA CCAAGTTCTC GCT GGCATTGTGGGCTGCTTGGGCATTGGGGCCACCGTGGTGCTGAAACCAAGTTCTCAGCT	864



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図 7

PSEC67: 1271 GGTCAGTTCTGGGAAGATTGCCAGCAGCACAGGGTGACGGTGTTCAGTACATTGGGGAG 1330  
 G CAGTTCTGGGA GATTGCCAG A CACAGGGTGAC GTGTTCAGTACATTGGGGAG  
 m. FATP3: 865 AGCCAGTTCTGGGACGATTGCCAGAAACACAGGGTGACAGTGTTCAGTACATTGGGGAG 924  
 PSEC67: 1331 CTGTGCCGATACCTTGTC AACCAGCCCCGAGCAAGGCAGAACGTGGCCATAAGGTCCGG 1390  
 TGTGCCGATACCT GTCAACCAGCCCCGAGCAAGGCAG TG CCATAAGGT CG  
 m. FATP3: 925 TTGTGCCGATACCTCGTCAACCAGCCCCGAGCAAGGCAGAGTTTGACCATAAGGTGCGC 984  
 PSEC67: 1391 CTGGCAGTGGGCAGCGGGCTGCGCCAGATACCTGGGAGCGTTTTGTGCGGCGCTTCGGG 1450  
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 m. FATP3: 985 TTGGCAGTGGGCAGTGGGTGCGCCAGACACCTGGGAGCGTTTCCTGCGGCGATTGGA 1044  
 PSEC67: 1451 CCCCTGCAGGTGCTGGAGACATATGACTGACAGAGGGCAACGTGGCCACCATCAACTAC 1510  
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 m. FATP3: 1045 CCTCTGCAGATACTGGAGACGTATGGCATGACAGAGGGCAACGTAGCTACGTTCAATTAC 1104  
 PSEC67: 1511 ACAGGACAGCGGGGCGCTGTGGGGCGTGCTTCCTGGCTTTACAAGCATATCTTCCCCTTC 1570  
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 PSEC67: 1571 TCCTTGATTGCTATGATGTCAACACAGGAGAGCCAATTCGGGACCCCCAGGGGCACTGT 1630  
 TCCTTGATTG TA GATGTCA ACAGG GAGCC ATTCCG A CCCAGGGGCACTG  
 m. FATP3: 1165 TCCTTGATTGATACGATGTGATGACAGGGGAGCCTATTCCGAATGCCAGGGGCACTGC 1224  
 PSEC67: 1631 ATGGCCACATCTCCAGGTGAGCCAGGGCTGCTGGTGGCCCCGTAAGCCAGCAGTCCCCA 1690  
 ATG CCACATCTCCAGGTGAGCCAGG CT CTGGTGGCCCC GT AGCCAGCAGTCCCC  
 m. FATP3: 1225 ATGACCACATCTCCAGGTGAGCCAGGCCTACTGGTGGCCCCAGTGAGCCAGCAGTCCCC 1284  
 PSEC67: 1691 TTCCTGGGCTATGCTGGCGGGCCAGAGCTGGCCCAGGGGAAGTTGCTAAAGGATGTCTTC 1750  
 TTCCTGGGCTATGCTGG G CC GAGCTGGCC AGG AAG TGCT AAGGATGTCTTC  
 m. FATP3: 1285 TTCCTGGGCTATGCTGGGGCTCCGGAGCTGGCCAAGGACAAGCTGCTGAAGGATGTCTTC 1344  
 PSEC67: 1751 CGGCCTGGGGATGTTTTCTTCAACACTGGGGACCTGCTGGTCTGCGATGACCAAGGTTTT 1810  
 GG CTGGGGA GTTTCTTCAA ACTGGGGACCT TGGTCTG GATGA CAAGG TTT  
 m. FATP3: 1345 TGGTCTGGGGACGTTTTCTTCAATACTGGGGACCTCTTGGTCTGTGATGAGCAAGGCTTT 1404  
 PSEC67: 1811 CTCCGCTTCCATGATCGTACTGGAGACACCTTCAGGTGGAAGGGGAGAATGTGGCCACA 1870  
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 AC GA GTGGC GAGGTCTT GAG CCCT GA TT CTTGAGGAGGTGAAC TCTATGGA  
 m. FATP3: 1465 ACTGAAGTGGCTGAGGTCTTGAGACCCTGGACTTCCTTCAGGAGGTGAACATCTATGGA 1524  
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 m. FATP3: 1525 GTCACGGTGCCAGGGCACGAAGGCAGGGCAGGCATGGCGGCCTTGGCTCTGCGGCCCCG 1584  
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 m. FATP3: 1585 CAGGCTCTGAACCTGGTGCAGCTCTACAGCCATGTTTCTGAGAACTTGCCACCGTATGCC 1644  
 PSEC67: 2051 CGGCCCCGATTCTCAGGCTCCAGGAGTCTTTGGCCACCACAGAGACCTTCAAACAGCAG 2110  
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 m. FATP3: 1645 CGACCTCGGTTTCTCAGGCTCCAGGAATCTTTGGCCACTACTGAGACCTTCAAACAGCAG 1704





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PSEC67: 2111 AAAGTTCGGATGGCAAATGAGGGCTTCGACCCAGCACCTGTCTGACCCACTGTACGTT 2170  
AA GTT GGATGGC AATGAGGGCTT GACCCAG CTGTCTGACCCACT TA GTT

m. FATP3:1705 AAGTTAGGATGGCCAATGAGGGCTTTGACCCAGTGTACTGTCTGACCCACTCTATGTT 1764

PSEC67: 2171 CTGGACCAGGCTGTAGGTGCCTACCTGCCCCTCACAACCTGCCCGGTACAGCGCCCTCCTG 2230  
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m. FATP3:1765 CTGGACCAAGATATAGGGGCCTACCTGCCCCTCACACCTGCCCGGTACAGTGCCTCCTG 1824

PSEC67: 2231 GCAGGAAACCTTCGAATCTGA 2251  
C GGA ACCTTCGAATCTGA

m. FATP3:1825 TCTGGAGACCTTCGAATCTGA 1845



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図 9

PSEC67:	61'	PLLLKLHLWPQLRWLPADLAFVRALCCKRALRARALAAAAADPEGPEGCSLAWRLAE *****. *. ***** AADPESESGLAWRLAY
m. FATP3:	1"	
PSEC67:	121'	LAQRAAHTFL IHGSRFSYSEAESNRARAFRLALGWDWGPDGSDGEGSAGEGERA **.....*****. ****. ***** ***** ** . * . *... **..**.*.
m. FATP3:	21"	LAREQPTHTFL IHGAQRF SYAEAESNR IARAF LRARGWTGRRGSGR—GSTEEGARV
PSEC67:	181'	APGAGDAAAGSGAEFAGGDGAARGGAAAPLSPGATVALLPAGPEFLWLVFGLAKAGLR ** *** . *** *. *. *. *****. ****. *****
m. FATP3:	79"	APPAGD—AAAR—GTTAPPLAPGATVALLPAGPDFLWLVFGLAKAGLR
PSEC67:	241'	TAFVPTALRRGPLLHCLRSCGARALVLAPEFLESLEPDLPALRAMGLHLWAAGPHTPAG *****. *****. *****. ****. *. **
m. FATP3:	125"	TAFVPTALRRGPLLHCLRSCGASALVLAPEFLESLEPDLPALRAMGLHLWATGPETNVAG
PSEC67:	301'	ISDLLAEVSAEVDGPVPGYLSSPQSI TDTCLYIFTSGTTGLPKAARI SHLKLQCQGFYQ **..**.*...**. *****. **. * *****. *****. *****.
m. FATP3:	185"	ISNLLSEAADQVDEPVPGYLSAPQNM DTCLYIFTSGTTGLPKAARI SHLKLQCQGFYH
PSEC67:	361'	LCGVHQEDVIYLALPLYHMSGSLLGIVGCMGIGATVVLKSKFSAGQFWEDCQHRVTVFQ *****. *****. *****. *****. *****. *****. *****.
m. FATP3:	245"	LCGVHQEDVIYLALPLYHMSGSLLGIVGCLGIGATVVLKPKFSASQFWDDCQHRVTVFQ
PSEC67:	421'	YIGELCRYLVNQPPSKAERGHKVRLAVGSGLRPDTWERFVRFGPLQVLETYGLTEGNVA *****. *****. *****. *****. *****.
m. FATP3:	305"	YIGELCRYLVNQPPSKAEFDHKVRLAVGSGLRPDTWERFLRRFGPLQILETYGMTEGNVA
PSEC67:	481'	TINYTGQRGAVGRASWLYKHIFPFSLIRYDVTTGEP IRDPQGHCMATSPGEPGLLVAPVS *. ****. *****. *****. *****. *****. *****.
m. FATP3:	365"	TFNYTGRQGA VGRASWLYKHIFPFSLIRYDVT TGEP IRNAQGHCMATSPGEPGLLVAPVS
PSEC67:	541'	QQSPFLGYAGGP ELAQGKLLKDVFRPGDVFFNTGDLLVCDDQGFLRFHDRTGDTFRWKGE *****. ****. . *****. . *****. *****. *****. *****.
m. FATP3:	425"	QQSPFLGYAGAP ELAKDKLLKDVFWSGDVFFNTGDLLVCDEQGFLRFHDRTGDTIRWKGE
PSEC67:	601'	NVATTEVAEVFEALDFLQEVN VYGVTVPGHEGRAGMAALVLRPPHALDLMQLYTHVSEN *****. *. *****. *****. *****. ****. **. *. ****. *****
m. FATP3:	485"	NVATTEVAEVLETDFLQEVNIYGVTVPGHEGRAGMAALALRPPQALNLVQLYSHVSEN
PSEC67:	661'	PPYARPRFLRLQESLATTETFKQKVRMANEGFDPSTLSDPLYVLDQAVGAYLPLTTARY *****. *****. *****. *****. *****.
m. FATP3:	545"	PPYARPRFLRLQESLATTETFKQKVRMANEGFDP SVLSDPLYVLDQDYGAYLPLTPARY
PSEC67:	721'	SALLAGNLRI ****. *. ***
m. FATP3:	605"	SALLSGDLRI



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PSEC67:	61'	PLLLKLHLWPQLRWLPADLAFVRLCCKRALRARALAAAAADPEGPEGGCSLAWRLAE
acyl CoA:	1"	MLSAIYTVLA
PSEC67:	121'	LAQQRAAHTFLIHGSRRFYSSEAERESNRAARAFRLALGWDWGPDGGDSGEGSAGEGERA
acyl CoA:	11"	GLLFLPLLNLCCPYFFQDIGYFLKVAAGRRVRSYGQRRPARTILRAFLEKARQTPHKP
PSEC67:	181'	APGAGDAAAGSGAEFAGGDGAARGGGAAPLSPGATVALLPAGPEFLWLWFG LAKAGLR
acyl CoA:	71"	FLLFRDETLTYAQVDRRSNQVARALHDHLGLRQGDCVALLMGNEPAYVWLWLGLVKLGCA
PSEC67:	241'	TAFVPTALRRGPLLHCLRSCGARALVLAPEFLESLEPDLPALRAMGLHLWAAGPGTHPAG
acyl CoA:	131"	MACLNYNIRAKSLLHCFQCCGAKVLLVSPELQAAVEEILPSLKKDDVSIYVVSRTSNTDG
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acyl CoA:	191"	IDSFLDKVDEVSTEPESWRSEVTFSTPALYIYTS GTTGLPKAAMITHQRIWYGTGLTF
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acyl CoA:	251"	VSGLKADDVIYITLPHYSAALLIGHGCI VAGATLALRTKFSASQFWD DCRKYNVTVIQ
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acyl CoA:	371"	FMNYARKVGAVGRVNYLQKKIITYDL IKYDVEKDEPVRDENG YCVRVPKGEVGLLVCKIT
PSEC67:	541'	QQSPFLGYAGGP ELAQGKLLKDVFRPGDVFFNTGDLLVCDDQGF LRFH DRTGDTFRWKGE
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PSEC67:	661'	PPYARPRFLRLQESLATTETFKQ QKVRMANEGFDPSTLSDPLYVLDQAVGAYLPLTTARY
acyl CoA:	551"	PSYARPRFLRIQDTIEITGTFKHKMTLVEEGFNP AVIKDALYFLDDTAKMYVPMTEDIY
PSEC67:	721'	SALLAGNLRI
acyl CoA:	611"	NAISAKTLKL



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<120> Fatty Acid Transfer Protein, and a gene encoding the protein.

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<151> 1999-07-08

<150> JP 2000-128993

<151> 2000-04-25

<150> US 60/159586

<151> 1999-10-18

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Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val Ala	
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Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly Arg Ala Ser Trp	
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Leu Tyr Lys His Ile Phe Pro Phe Ser Leu Ile Arg Tyr Asp Val Thr	
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Pro Gly Glu Pro Gly Leu Leu Val Ala Pro Val Ser Gln Gln Ser Pro	
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Phe Leu Gly Tyr Ala Gly Gly Pro Glu Leu Ala Gln Gly Lys Leu Leu	
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Asp Thr Phe Arg Trp Lys Gly Glu Asn Val Ala Thr Thr Glu Val Ala	
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Glu Val Phe Glu Ala Leu Asp Phe Leu Gln Glu Val Asn Val Tyr Gly	
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gtc act gtg cca ggg cat gaa ggc agg gct gga atg gca gcc cta gtt 1978  
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ctg cgt ccc ccc cac gct ttg gac ctt atg cag ctc tac acc cac gtg 2026  
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 Glu Ser Leu Ala Thr Thr Glu Thr Phe Lys Gln Gln Lys Val Arg Met  
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 690 695 700

ctg gac cag gct gta ggt gcc tac ctg ccc ctc aca act gcc cgg tac 2218  
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Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Ala His  
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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/04549

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C12N15/12, 5/10, 1/15, 1/19, 1/21, C12P21/02  
C07K14/47, 16/18, C12Q1/02, 1/68  
C12P21/02,

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C12N15/00-15/90

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

GENBANK/DBDJ/EMBL/GENESEQ  
SWISSPROT/PIR/GENESEQ  
BIOSIS/MEDLINE/WPI (STN)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO, 99-46281, A2 (GENENTECH INC.), 16 September, 1999 (16.09.99), Full text (Family: none)	1-16
P,X	WO, 99-36537, A2 (MILLENNIUM PHARM INC.), 22 July, 1999 (22.07.99), Full text & AU, 9923108, A	1-16
X	Biochimica et Biophysica Acta, 1443, 1998 Barbara A. Fitscher et al., "Tissue distribution and cDNA cloning of a human fatty acid transport protein (hsFATP4)", p.381-385	1-16
X	Proc. Natl. Acad. Sci. USA, 95, July 1998 David Hirsch et al., "A family of fatty acid transporters conserved from mycobacterium to man", p.8625-8629	1-16
A	Cell, 79, Nov.1994 Jean E. Schaffer et al., "Expression cloning and characterization of a novel adipocyte long chain fatty	1-16

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
03 October, 2000 (03.10.00)

Date of mailing of the international search report  
24 October, 2000 (24.10.00)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/04549

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	acid transport protein", p.427-436	
A	J. Biol. Chem., 271(48), Nov.1996 A. Uchiyama et al., "Molecular cloning of cDNA encoding rat very long-chain acyl-CoA synthetase", p.30360-30365	1-16
A	Circulation, 96(8)suppl., 1997 Jean E. Schaffer et al., "Cloning and structure-function analysis of human heart fatty acid transport protein", p. I363	1-16

## 国際調査報告

国際出願番号 PCT/JPO0/04549

## A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. Cl<sup>7</sup> C12N15/12, 5/10, 1/15, 1/19, 1/21, C12P21/02  
C07K14/47, 16/18, C12Q1/02, 1/68

## B. 調査を行った分野

## 調査を行った最小限資料 (国際特許分類 (IPC))

Int. Cl<sup>7</sup> C12N15/00-15/90

最小限資料以外の資料で調査を行った分野に含まれるもの

## 国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

GENBANK/DDBJ/EMBL/GENESEQ  
SWISSPROT/PIR/GENESEQ  
BIOSIS/MEDLINE/WPI (STN)

## C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
P, X	WO, 99-46281, A2 (GENENTECH INC.) 16. 9月. 1999 (16. 09. 99) 全文 (ファミリーなし)	1-16

☒ C欄の続きにも文献が列举されている。☐ パテントファミリーに関する別紙を参照。

## \* 引用文献のカテゴリー

- 「A」 特に関連のある文献ではなく、一般的技術水準を示すもの  
「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの  
「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)  
「O」 口頭による開示、使用、展示等に言及する文献  
「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

- の日の後に公表された文献  
「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの  
「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの  
「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの  
「&」 同一パテントファミリー文献

国際調査を完了した日

03. 10. 00

国際調査報告の発送日

24.10.00

国際調査機関の名称及びあて先

日本国特許庁 (ISA/JP)

郵便番号100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)

鈴木 恵理子

4B

9838

電話番号 03-3581-1101 内線 3448

C (続き) . 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
P, X	WO, 99-36537, A2 (MILLENNIUM PHARM INC.) 22. 7月. 1999 (22. 07. 99) 全文 & AU, 9923108, A	1-16
X	Biochimica et Biophysica Acta, 1443, 1998 Barbara A. Fitscher et al., "Tissue distribution and cDNA cloning of a human fatty acid transport protein(hsFATP4)", p. 381-385	1-16
X	Proc. Natl. Acad. Sci. USA, 95, July 1998 David Hirsch et al., "A family of fatty acid transporters conserved from mycobacterium to man", p. 8625-8629	1-16
A	Cell, 79, Nov. 1994 Jean E. Schaffer et al., "Expression cloning and characterization of a novel adipocyte long chain fatty acid transport protein", p. 427-436	1-16
A	J. Biol. Chem., 271(48), Nov. 1996 A. Uchiyama et al., "Molecular cloning of cDNA encoding rat very long-chain acyl-CoA synthetase", p. 30360-30365	1-16
A	Circulation, 96(8) suppl., 1997 Jean E. Schaffer et al., "Cloning and structure-function analysis of human heart fatty acid transport protein", p. I363	1-16